



Indiana Department of Education

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Indiana Superintendent of Public Instruction

3-5 Mathematics Resources to Extend and Enrich the Core Curriculum Appropriate for High Ability Students Indiana Academic Standard Strand:

Number Sense

Resource	Annotation	Differentiation Tip(s)	Correlating Indiana Academic Strand Standards	Correlating Indiana Academic Process Standards
<p>Cook, M. <i>Percentage Tiles II</i>. Balboa Island, CA: Marcy Cook Math. www.marcycookmath.com</p> <p><i>Also found in: Computation</i></p>	<p>Using each digit, 0-9, once and only once for each challenge task, students solve the three following types of percentage problems:</p> <ol style="list-style-type: none"> 1. What is 50% of 90? 2. 45 is what percent of 90? 3. 50% of what is 45? <p>There are 20 increasingly difficult task cards in the set.</p>	<p><i>Self-Pacing:</i> Students can progress through the 20 cards in each set/title at their own pace, keeping track of their progress and moving through the cards as far as they are able.</p> <p><i>Choice:</i> Provide students all 20 cards in the set. Allow them to choose a certain number of cards they would like to complete, explaining that the cards from number 1 to 20 are progressively more</p>	<p>4.NS.6 5.NS.6</p>	<p>PS.1; PS.2; PS.3; PS.4; PS.5; PS.6; PS.7; PS.8</p>

		difficult.		
DynaMath. dynamath.scholastic.com	DynaMath is a monthly magazine that provides upper-elementary students with challenging and engaging real-world math applications to extend and enrich the core curriculum.	Flexible Grouping: Assign like-ability partners or small groups to collaboratively explore and work through the magazine activities.	* varies with monthly issues	* varies with monthly issues
VandeCreek, B. (2000) Math Rules! 3rd-4th. Marion, IL: Pieces of Learning. www.piecesoflearning.com (ISBN: 978-1-880505-80-9) Also found in: <ul style="list-style-type: none"> • Computation • Algebraic Thinking • Geometry • Measurement • Data Analysis/Data Analysis and Statistics 	This reproducible resource provides a year's worth of weekly 8-problem enrichment challenge worksheets for both third and fourth grade. The variety of problems covers standards from all content strands. These worksheets are ideal for homework use.	Tiered delivery: Match the grade level resource most appropriate to the readiness level of students. This resource is available for grades 1-6.	3.NS.1; 3.NS.2; 3.NS.3; 3.NS.4; 3.NS.5; 3.NS.6; 3.NS.7; 3.NS.8; 3.NS.9 4.NS.1; 4.NS.2; 4.NS.3; 4.NS.5; 4.NS.6; 4.NS.7; 4.NS.8; 4.NS.9	PS.1; PS.2; PS.3; PS.4; PS.5; PS.6; PS.7; PS.8

<p>VandeCreek, B. (2000) Math Rules! 5th-6th. Marion, IL: Pieces of Learning. www.piecesoflearning.com (ISBN: 978-1-880505-81-6)</p> <p><i>Also found in:</i></p> <ul style="list-style-type: none"> • Computation • Algebraic Thinking • Geometry • Measurement • Data Analysis/Data Analysis and Statistics 	<p>This reproducible resource provides a year's worth of weekly 8-problem enrichment challenge worksheets for both fifth and sixth grade. The variety of problems covers standards from all content strands. These worksheets are ideal for homework use.</p>	<p>Tiered delivery: Match the grade level resource most appropriate to the readiness level of students. This resource is available for grades 1-6.</p>	<p>4.NS.1; 4.NS.2; 4.NS.3; 4.NS.4; 4.NS.5; 4.NS.6; 4.NS.7; 4.NS.8; 4.NS.9</p> <p>5.NS.1; 5.NS.2; 5.NS.3; 5.NS.4; 5.NS.5; 5.NS.6</p>	<p>PS.1; PS.2; PS.3; PS.4; PS.5; PS.6; PS.7; PS.8</p>
<p>Zaccaro, E. (2014) Upper Elementary Challenge Math. Bellevue, IA: Hickory Grove Press. www.challengemath.com (ISBN: 978-0-9854725-2-8)</p> <p><i>Also found in:</i></p> <ul style="list-style-type: none"> • Computation • Algebraic Thinking • Measurement 	<p>In this resource, "problem sets" follow an introduction meant for instruction. Each "problem set" presents a single problem type in increasingly complex steps. "Problem sets" are followed by a page of problem challenges on the same topic at the following four challenge levels:</p> <ul style="list-style-type: none"> • Level 1 (Easy) • Level 2 (Somewhat 	<p>Tiered Delivery: Following the whole-class introduction to a specific type of problem, students can complete the appropriately leveled follow-up challenges independently or with a like-ability partner, choosing from one of the four difficulty levels.</p>	<p>3.NS.1; 3.NS.3; 3.NS.6; 3.NS.7; 3.NS.8</p> <p>4.NS.1; 4.NS.3; 4.NS.4; 4.NS.5; 4.NS.6;</p>	<p>PS.1; PS.2; PS.3; PS.4; PS.5; PS.6; PS.7; PS.8</p>

	<p>Challenging)</p> <ul style="list-style-type: none"> • Level 3 (Challenging) • Genius Level (Very Challenging) <p>Topics covered include: astronomy, problem solving, decimals, money, fractions, percents, metric system, algebra, probability, ratios, perimeter and circumference, areas, volumes, and bases.</p>		<p>4.NS.7</p> <p>5.NS.2; 5.NS.3; 5.NS.4; 5.NS.5; 5.NS.6</p>	
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